



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****12th June, 2018**Bishnupur

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th June, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th June, 2018)

Observed **28.6 mm** rainfall with **mainly cloudy to overcast sky** but **partly cloudy** during morning hours of 8th & 9th June. Maximum temperature recorded ranged from **26.0 to 32.4 °C** and minimum of **21.7 to 23.4 °C** with mean relative humidity **84.3 %** max and **74.5 %** min was recorded in the past four days with average wind speed was **2.8- 6.6 km/ hr**.

Weather forecast for next five days of Bishnupur (13th to 17th June, 2018)

Likely to have widespread heavy to very heavy rains upto Thursday then light rains during next five days and mainly cloudy to overcast sky with maximum temp. **25-27 °C** & minimum temp. **20-22 °C**. Relative humidity may reach up to **100 % (Max) and 97 % (Min)**. The average wind speed may be **0-2 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Construct bands around the crop field to maintain water level at 5-8 cm. - Drain out excess water due to heavy rains. - Apply Propiconazole @ 15ml/ 15 litres water after rains.
	Nursery and land preparation of main field (Kharif rice)		- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. Seeds for nursery may be sown after rains. - Land preparation of main field may be done after rains for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done after rains.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds after rains at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cucurbits	Flowering, Fruiting and Harvesting		- Proper staking system must be made to avoid fruits from touching soil. - Harvest mature crops before rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, after rains apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water. - Avoid water logging.
Colocassia	Vegetative		- Weeding and earthing up may be done after the wet spell. - Avoid water logging. - After rains, 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
Chilli/ capsicum	Flowering and fruiting to harvesting		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Harvest mature crops before rains.
Tomato	Fruiting to harvesting		- Harvest mature crops before rains. - Avoid water logging.



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



Animal Sciences				
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.				
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories	
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.	
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.	
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.	
		• Coccidiosis	• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.	
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.	
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).	
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.	
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used.	
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.	
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.	
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.	
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures	
Fishery				
* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.				
Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****12th June, 2018**Chandel

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th June, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th June, 2018)

Observed **28.6 mm** rainfall with **mainly cloudy to overcast sky** but **partly cloudy** during morning hours of 8th & 9th June. Maximum temperature recorded ranged from **26.0 to 32.4 °C** and minimum of **21.7 to 23.4 °C** with mean relative humidity **84.3 %** max and **74.5 %** min was recorded in the past four days with average wind speed was **2.8- 6.6 km/ hr.**

Weather forecast for next five days of Chandel (13th to 17th June, 2018)

Likely to have widespread heavy to very heavy rains upto Thursday then light rains during next five days and mainly cloudy to overcast sky with maximum temp. **24-26 °C** & minimum temp. **19-21 °C**. Relative humidity may reach up to **100 % (Max) and 96 % (Min)**. The average wind speed may be **0-3 km/hr.**

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Construct bands around the crop field to maintain water level at 5-8 cm. - Drain out excess water due to heavy rains. - Apply Propiconazole @ 15ml/ 15 litres water after rains.
	Nursery and land preparation of main field (Kharif rice)		- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. Seeds for nursery may be sown after rains. - Land preparation of main field may be done after rains for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done after rains.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds after rains at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cucurbits	Flowering, Fruiting and Harvesting		- Proper staking system must be made to avoid fruits from touching soil. - Harvest mature crops before rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, after rains apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water. - Avoid water logging.
Colocassia	Vegetative		- Weeding and earthing up may be done after the wet spell. - Avoid water logging. - After rains, 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
Chilli/ capsicum	Flowering and fruiting to harvesting		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Harvest mature crops before rains.
Tomato	Fruiting to harvesting		- Harvest mature crops before rains. - Avoid water logging.



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



Animal Sciences			
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
		• Coccidiosis	• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used.
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures

Fishery				
* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.				
Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****12th June, 2018**Churachandpur

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th June, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th June, 2018)

Observed **28.6 mm** rainfall with **mainly cloudy to overcast sky** but **partly cloudy** during morning hours of 8th & 9th June. Maximum temperature recorded ranged from **26.0 to 32.4 °C** and minimum of **21.7 to 23.4 °C** with mean relative humidity **84.3 %** max and **74.5 %** min was recorded in the past four days with average wind speed was **2.8- 6.6 km/ hr.**

Weather forecast for next five days of Churachandpur (13th to 17th June, 2018)

Likely to have widespread heavy to very heavy rains upto Thursday then light rains during next five days and mainly cloudy to overcast sky with maximum temp. **24-26 °C** & minimum temp. **19-21 °C.** Relative humidity may reach up to **100 % (Max) and 93 % (Min).** The average wind speed may be **2-4 km/hr.**

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Construct bands around the crop field to maintain water level at 5-8 cm. - Drain out excess water due to heavy rains. - Apply Propiconazole @ 15ml/ 15 litres water after rains.
	Nursery and land preparation of main field (Kharif rice)		- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. Seeds for nursery may be sown after rains. - Land preparation of main field may be done after rains for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done after rains.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds after rains at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cucurbits	Flowering, Fruiting and Harvesting		- Proper staking system must be made to avoid fruits from touching soil. - Harvest mature crops before rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, after rains apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water. - Avoid water logging.
Colocassia	Vegetative		- Weeding and earthing up may be done after the wet spell. - Avoid water logging. - After rains, 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
Chilli/ capsicum	Flowering and fruiting to harvesting		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Harvest mature crops before rains.
Tomato	Fruiting to harvesting		- Harvest mature crops before rains. - Avoid water logging.



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



Animal Sciences			
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
		• Coccidiosis	• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used.
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures

Fishery				
* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.				
Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****12th June, 2018***Imphal East*

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th June, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th June, 2018)

Observed **28.6 mm** rainfall with **mainly cloudy to overcast sky** but **partly cloudy** during morning hours of 8th & 9th June. Maximum temperature recorded ranged from **26.0 to 32.4 °C** and minimum of **21.7 to 23.4 °C** with mean relative humidity **84.3 %** max and **74.5 %** min was recorded in the past four days with average wind speed was **2.8- 6.6 km/ hr.**

Weather forecast for next five days of Imphal East (13th to 17th June, 2018)

Likely to have widespread heavy to very heavy rains upto Thursday then light rains during next five days and mainly cloudy to overcast sky with maximum temp. **24-26 °C** & minimum temp. **19-21 °C.** Relative humidity may reach up to **100 % (Max) and 96 % (Min).** The average wind speed may be **0-2 km/hr.**

<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Construct bands around the crop field to maintain water level at 5-8 cm. - Drain out excess water due to heavy rains. - Apply Propiconazole @ 15ml/ 15 litres water after rains.
	Nursery and land preparation of main field (Kharif rice)		- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. Seeds for nursery may be sown after rains. - Land preparation of main field may be done after rains for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done after rains.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds after rains at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
<i>Horticulture Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cucurbits	Flowering, Fruiting and Harvesting		- Proper staking system must be made to avoid fruits from touching soil. - Harvest mature crops before rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, after rains apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water. - Avoid water logging.
Colocassia	Vegetative		- Weeding and earthing up may be done after the wet spell. - Avoid water logging. - After rains, 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
Chilli/ capsicum	Flowering and fruiting to harvesting		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Harvest mature crops before rains.
Tomato	Fruiting to harvesting		- Harvest mature crops before rains. - Avoid water logging.



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



Animal Sciences			
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
		• Coccidiosis	• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used.
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures

Fishery				
* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.				
Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****12th June, 2018**Imphal West

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th June, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th June, 2018)

Observed **28.6 mm** rainfall with **mainly cloudy to overcast sky** but **partly cloudy** during morning hours of 8th & 9th June. Maximum temperature recorded ranged from **26.0 to 32.4 °C** and minimum of **21.7 to 23.4 °C** with mean relative humidity **84.3 %** max and **74.5 %** min was recorded in the past four days with average wind speed was **2.8- 6.6 km/ hr**.

Weather forecast for next five days of Imphal West (13th to 17th June, 2018)

Likely to have widespread heavy to very heavy rains upto Thursday then light rains during next five days and mainly cloudy to overcast sky with maximum temp. **24-26 °C** & minimum temp. **19-21 °C**. Relative humidity may remain in the range **76 - 100 %**. The average wind speed may be **0-2 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Construct bands around the crop field to maintain water level at 5-8 cm. - Drain out excess water due to heavy rains. - Apply Propiconazole @ 15ml/ 15 litres water after rains.
	Nursery and land preparation of main field (Kharif rice)		- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. Seeds for nursery may be sown after rains. - Land preparation of main field may be done after rains for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done after rains.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds after rains at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cucurbits	Flowering, Fruiting and Harvesting		- Proper staking system must be made to avoid fruits from touching soil. - Harvest mature crops before rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, after rains apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water. - Avoid water logging.
Colocassia	Vegetative		- Weeding and earthing up may be done after the wet spell. - Avoid water logging. - After rains, 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
Chilli/ capsicum	Flowering and fruiting to harvesting		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Harvest mature crops before rains.
Tomato	Fruiting to harvesting		- Harvest mature crops before rains. - Avoid water logging.



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



Animal Sciences				
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.				
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories	
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.	
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.	
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.	
		• Coccidiosis	• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.	
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.	
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).	
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.	
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used.	
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.	
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.	
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.	
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures	
Fishery				
* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.				
Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****12th June, 2018**Senapati

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th June, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th June, 2018)

Observed **28.6 mm** rainfall with **mainly cloudy to overcast sky** but **partly cloudy** during morning hours of 8th & 9th June. Maximum temperature recorded ranged from **26.0 to 32.4 °C** and minimum of **21.7 to 23.4 °C** with mean relative humidity **84.3 %** max and **74.5 %** min was recorded in the past four days with average wind speed was **2.8- 6.6 km/ hr.**

Weather forecast for next five days of Senapati (13th to 17th June, 2018)

Likely to have widespread heavy to very heavy rains upto Thursday then light rains during next five days and mainly cloudy to overcast sky with maximum temp. **22-23 °C** & minimum temp. **17-18 °C**. Relative humidity may reach up to **100 % (Max) and 95 % (Min)**. The average wind speed may be **2-3 km/hr.**

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Construct bands around the crop field to maintain water level at 5-8 cm. - Drain out excess water due to heavy rains. - Apply Propiconazole @ 15ml/ 15 litres water after rains.
	Nursery and land preparation of main field (Kharif rice)		- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. Seeds for nursery may be sown after rains. - Land preparation of main field may be done after rains for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done after rains.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds after rains at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cucurbits	Flowering, Fruiting and Harvesting		- Proper staking system must be made to avoid fruits from touching soil. - Harvest mature crops before rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, after rains apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water. - Avoid water logging.
Colocassia	Vegetative		- Weeding and earthing up may be done after the wet spell. - Avoid water logging. - After rains, 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



Animal Sciences				
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.				
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories	
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.	
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.	
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.	
		• Coccidiosis	• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.	
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.	
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).	
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.	
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used.	
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.	
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.	
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.	
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures	
Fishery				
* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.				
Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****12th June, 2018**Tamenglong

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th June, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th June, 2018)

Observed **28.6 mm** rainfall with **mainly cloudy to overcast sky** but **partly cloudy** during morning hours of 8th & 9th June. Maximum temperature recorded ranged from **26.0 to 32.4 °C** and minimum of **21.7 to 23.4 °C** with mean relative humidity **84.3 %** max and **74.5 %** min was recorded in the past four days with average wind speed was **2.8- 6.6 km/ hr.**

Weather forecast for next five days of Tamenglong (13th to 17th June, 2018)

Likely to have widespread heavy to very heavy rains upto Thursday then light rains during next five days and mainly cloudy to overcast sky with maximum temp. **23-24 °C** & minimum temp. **18-19 °C**. Relative humidity may reach up to **100 % (Max) and 97 % (Min)**. The average wind speed may be **2 km/hr.**

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Construct bands around the crop field to maintain water level at 5-8 cm. - Drain out excess water due to heavy rains. - Apply Propiconazole @ 15ml/ 15 litres water after rains.
	Nursery and land preparation of main field (Kharif rice)		- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. Seeds for nursery may be sown after rains. - Land preparation of main field may be done after rains for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done after rains.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds after rains at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cucurbits	Flowering, Fruiting and Harvesting		- Proper staking system must be made to avoid fruits from touching soil. - Harvest mature crops before rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, after rains apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water. - Avoid water logging.
Colocassia	Vegetative		- Weeding and earthing up may be done after the wet spell. - Avoid water logging. - After rains, 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
Chilli/ capsicum	Flowering and fruiting to harvesting		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Harvest mature crops before rains.
Tomato	Fruiting to harvesting		- Harvest mature crops before rains. - Avoid water logging.



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



Animal Sciences			
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
		• Coccidiosis	• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used.
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures

Fishery				
* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.				
Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



MANIPUR BULLETIN

12th June, 2018

Thoubal

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th June, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th June, 2018) Observed 28.6 mm rainfall with mainly cloudy to overcast sky but partly cloudy during morning hours of 8th & 9th June. Maximum temperature recorded ranged from 26.0 to 32.4 °C and minimum of 21.7 to 23.4 °C with mean relative humidity 84.3 % max and 74.5 % min was recorded in the past four days with average wind speed was 2.8- 6.6 km/ hr.</p>	<p>Weather forecast for next five days of Thoubal (13th to 17th June, 2018) Likely to have widespread heavy to very heavy rains upto Thursday then light rains during next five days and mainly cloudy to overcast sky with maximum temp. 25-27 °C & minimum temp. 20-22 °C. Relative humidity may reach up to 100 % (Max) and 97 % (Min). The average wind speed may be 0-2 km/hr.</p>
--	--

<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Construct bands around the crop field to maintain water level at 5-8 cm. - Drain out excess water due to heavy rains. - Apply Propiconazole @ 15ml/ 15 litres water after rains.
	Nursery and land preparation of main field (Kharif rice)		- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. Seeds for nursery may be sown after rains. - Land preparation of main field may be done after rains for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done after rains.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds after rains at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.

<i>Horticulture Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cucurbits	Flowering, Fruiting and Harvesting		- Proper staking system must be made to avoid fruits from touching soil. - Harvest mature crops before rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, after rains apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water. - Avoid water logging.
Colocassia	Vegetative		- Weeding and earthing up may be done after the wet spell. - Avoid water logging. - After rains, 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
Chilli/ capsicum	Flowering and fruiting to harvesting		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Harvest mature crops before rains.
Tomato	Fruiting to harvesting		- Harvest mature crops before rains. - Avoid water logging.



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



Animal Sciences				
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.				
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories	
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.	
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.	
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.	
		• Coccidiosis	• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.	
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.	
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).	
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.	
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used.	
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.	
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.	
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.	
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures	
Fishery				
* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.				
Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****12th June, 2018**Ukhrul

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th June, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th June, 2018)

Observed **28.6 mm** rainfall with **mainly cloudy to overcast sky** but **partly cloudy** during morning hours of 8th & 9th June. Maximum temperature recorded ranged from **26.0 to 32.4 °C** and minimum of **21.7 to 23.4 °C** with mean relative humidity **84.3 %** max and **74.5 %** min was recorded in the past four days with average wind speed was **2.8- 6.6 km/ hr.**

Weather forecast for next five days of Ukhrul (13th to 17th June, 2018)

Likely to have widespread heavy to very heavy rains upto Thursday then light rains during next five days and mainly cloudy to overcast sky with maximum temp. **23-24 °C** & minimum temp. **18-19 °C.** Relative humidity may reach up to **100 % (Max) and 97 % (Min).** The average wind speed may be **2-3 km/hr.**

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation to flowering (Pre-kharif rice)	Sheath blight/ sheath rot	- Construct bands around the crop field to maintain water level at 5-8 cm. - Drain out excess water due to heavy rains. - Apply Propiconazole @ 15ml/ 15 litres water after rains.
	Nursery and land preparation of main field (Kharif rice)		- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou- 13. Seeds for nursery may be sown after rains. - Land preparation of main field may be done after rains for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.
Kharif Maize	Sowing		- Sowing may be done after rains.
Soybean	Sowing		- Sow seed after rains @ 40-45 kg/ha or 10-11.3 kg of seed/ sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing		- Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds after rains at spacing 30cm x 15cm after rains. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram/ Rice Bean	Sowing		- Sowing may be done after rains by broadcasting or dibbling. Plot must be kept weed free to avoid insect/ pest.
Seeds storage	Post harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cucurbits	Flowering, Fruiting and Harvesting		- Proper staking system must be made to avoid fruits from touching soil. - Harvest mature crops before rains.
Ginger/ Turmeric	Vegetative	Leaf Spot	To prevent Leaf Spot disease, after rains apply Bordeaux mixture (5:5:50) after 4 – 5 weeks of sowing or Captan @ 1.5 g/l of water. - Avoid water logging.
Colocassia	Vegetative		- Weeding and earthing up may be done after the wet spell. - Avoid water logging. - After rains, 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam. Prophylactic measures against leaf blight should be taken up. Spray Redomil@ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



Animal Sciences				
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.				
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories	
Poultry (Chicken/ Duck)	All age groups	• Ranikhet disease	• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.	
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.	
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.	
		• Coccidiosis	• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.	
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.	
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).	
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.	
		• Skin disease	• Sprayer of <i>Anti-Psoroptic</i> may be used.	
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.	
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.	
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.	
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures	
Fishery				
* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.				
Type of Farming	Stage	Management	Agro-metrological advisories	
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.	
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.	
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.	
	Carp diseases	Argulus (fish lice) infection		- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO ₄ (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)		- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.

(I. Meghachandra Singh)
 Scientist i/c, GKMS